

Semi-Annual Report of Pesticide Use & Alternative Practices

July 1, 2022 – December 31, 2022



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Overview

In 2015, the Montgomery County Council adopted County Code Sec. 33B – Pesticide Use. Montgomery Parks began implementing sections of the regulation on July 1, 2016.

As required under the regulation, the Parks Department must submit semi-annual reports to the County Executive and County Council on or before January 15 and July 15 of each year.

This report covers the period of July 1, 2022, through December 31, 2022, and is available to the public in a manner consistent with the Montgomery County Open Data Act. This report contains the following information:

1. Registered pesticide usage details, including products compatible with Montgomery County’s pesticide law*, in County parks during the preceding period, including:
 - the common name of each registered and Montgomery County-approved pesticide used,
 - the location of each application,
 - the date and time of each application, and
 - the reason for each pesticide use of a registered pesticide or Montgomery County-approved pesticide.
2. Status of the pesticide-free park program implemented under the regulation.

Montgomery Parks provides up-to-date information about the department’s Integrated Pest Management Program to the public through multiple channels including a dedicated webpage, social media, press releases, and a customer service department.

The webpage (MontgomeryParks.org/pesticides) includes information about the Pesticide Reduction and Integrated Pest Management (IPM) program, frequently-asked-questions and answers, semi-annual pesticide use reports, a map of pesticide-free parks, and weekly-updated schedule of planned pesticide applications including the location, date, time, product and reason for the application.

*Products allowed under Montgomery County’s pesticide law must be listed by the National Organics Standards Board or designated as a minimum risk pesticide under FIFRA 25(b).

Montgomery Parks Integrated Pest Management Program

The department follows IPM principles to steward resources and protect them from pests (weeds, insects, animals, and disease) that may harm people or plants, impair function, and deteriorate infrastructure.

IPM principles combine multiple strategies and techniques to manage pests such as mechanical removal of pests, cultural methods to improve soil and plant health, conserving and introducing beneficial biological controls, and using organic as well as conventional pesticides.

Montgomery Parks manages more than 37,220 acres of parkland including 420 parks, 276 playgrounds, 290 athletic fields, 297 tennis outdoor courts, 227 basketball courts, and many other amenities.

Montgomery Parks is committed to balancing the demand for recreation while protecting and conserving our valuable natural and cultural resources to meet the needs of current and future generations. As such:

- The Parks Department does not use pesticides for cosmetic purposes.
- Pesticides are only used when necessary to protect amenities and park users.
- Staff who apply pesticides and fertilizers are certified and registered with the Maryland Department of Agriculture



Alternative Maintenance Practices

The Department's IPM strategy reduces or eliminates pesticide use through prioritization of alternative pest management practices.

Parks' Enterprise Asset Management System (EAM) tracks labor hours of staff managing weeds and other pests without the use of pesticides.

Alternative methods utilized by Parks staff include biological control (using beneficial organisms to control a pest), cutting and/or digging weeds with equipment, additional field dragging, use of hot foam or hot water to kill weeds and other pests, playground surface grooming beyond the maintenance standards, hand tool weeding, propane flaming, string trimming, and weed suppression with mulch or landscape fabric.

Below is a table detailing all the primary alternative maintenance practices staff utilized during the period of July 1, 2022 through December 31, 2022.

Alternative Method	Labor Hours	Labor Cost
String trim	15,936	\$583,134
Hand tool weeding	2,839	\$103,789
Hot foam/Hot water	1,603	\$63,373
Cut/dig weeds with equipment	523	\$19,476
Propane flaming	12	\$516
Drag athletic field (additional)	444	\$15,540
Playground surface grooming	107	\$10,056
Weed suppression	131	\$5,195
Biological control	10	\$429
Total:	21,605	\$801,508

Total labor hours for alternative maintenance practices to control pests between July 1, 2022 and December 31, 2022 was 21,605 hours at a labor cost of \$801,508. During this same period for the previous year, alternative practices were utilized for 8,141 hours at a labor cost of \$386,122.

Cover Crops for Weed Suppression

Pope Farm Nursery, Montgomery Parks plant production facility, has been experimenting with the use of a variety of ground covers and management methods to suppress weed growth in tree nursery rows. The use of cowpeas as a soil-building cover crop was utilized as a strategy to reduce traditional herbicide application techniques. The cowpeas were planted in alternating tree rows to compare weed pressure between cover-crop planted and traditionally maintained rows of trees. During this pilot, the traditionally maintained rows were treated with a pre-emergent herbicide twice and a post-emergent herbicide three to four times. The cowpea rows did not receive any herbicide treatment as they successfully outcompeted weed growth around the trees.

As a legume, the cowpeas provide an additional benefit of soil enrichment through nitrogen fixation, minimizing the need for fertilizer applications on the site. One challenge of utilizing the cowpea as a ground cover is its tendency to aggressively grow up the trees. Managing this required additional weekly labor in late summer to prune back the cowpeas but did allow for savings in herbicide application as well as in fuel use associated with running a spray tank. Ultimately, the ability to build soil and control weeds using the cover crop was advantageous, providing there is sufficient staffing to support the additional labor required. In the future, staff at Pope Farm Nursery will continue experimenting with cover crops in nursery rows but may consider options like crimson clover or buckwheat that remain low to the ground and do not climb.



The row on the left is a traditionally maintained row and the row on the right has cowpea ground cover.

Use of Beneficial Organisms to Manage Pest Populations

Staff at Brookside Gardens continue to make use of beneficial organisms to control pest populations in plant production and greenhouse spaces. Predatory biological controls such as Aphidoletes (*Aphidoletes aphidimyza*) are used to control aphids, and a spider mite predator (e.g., *Amblyseius californicus*) can be used to control spider mite populations affecting plants grown in the greenhouses. These beneficial organisms are delivered through a variety of mechanisms, optimized based on life cycle pattern. For example, the spider mite predator is housed in a sachet to allow for continuous and consistent release over many weeks.



delivery methods for beneficial organisms.

Mechanical Removal of Poison Ivy

Poison ivy (*Toxicodendron radicans*) is a common native plant in Maryland, typically seen as a woody vine. The berries of the plant serve as an important food source for a variety of bird species. However, contact with poison ivy for many results in an allergic reaction, including an itchy rash on the skin, but may also result in swelling or blistering. Park staff will remove poison ivy when it is determined to be in a location that may impact human health or safety. Below are images from before, during, and after staff utilized hand tools to mechanically remove poison ivy from a tree in West Fairland Local Park. Use of hand tools to manage weed pests takes considerable time and this practice is utilized across the county as an important alternative strategy to the use of pesticides.

During the reporting period, staff have spent 2,839 labor hours at a cost of \$103,789 using hand tools to remove and manage weed pests. It should be noted that in the case of the poison ivy at West Fairland, in the absence of pesticide use, staff will likely need to return multiple times to monitor and perform additional mechanical removal of the vines until full eradication is achieved.



Pesticide-Free Parks

Montgomery Parks manages 55 pesticide-free parks.

Pests in pesticide-free parks are managed using alternative methods, such as hot foam, string trimming, mechanical weed removal, and use of products approved by Montgomery County Code Sec. 33B.

In 2016, Montgomery Parks began managing 10 pesticide-free parks as part of a pilot program in compliance with the adoption of Montgomery County Code Sec. 33B. In September 2019, an additional 35 parks were added to the program, bringing the total number of parks managed without synthetic pesticides to 45. In summer 2022, 10 additional parks were added to the list which brings the total number of pesticide-free parks to 55. The parks added to the program are:

- Bauer Drive Local Park
- Caroline Freeland Urban Park
- Edith Throckmorton Neighborhood Park
- English Court Neighborhood Conservation Area
- Evans Parkway Neighborhood Park
- Flower Avenue Urban Park
- Glenmont Greenway Urban Park
- Maiden Lane Urban Park
- Saddlebrook Local Park
- Woods Local Park

The pesticide-free parks are in different regions of the county to ensure all residents have access to them. A list and map of the pesticide-free parks are included in the Appendix and on Montgomery Parks' website at MontgomeryParks.org/pesticides.

The pesticide-free parks are diverse and include local, urban, and neighborhood parks as well as neighborhood conservation areas. Amenities in these parks are equally diverse and include 20 basketball courts, 26 tennis courts, 13 athletic field diamonds, 13 athletic field rectangles, 12 picnic shelters and 39 playgrounds.

Pesticide-free parks are routinely inspected by staff to assess status of the amenities. To date, a few parks have been removed from the program because pest problems could not be addressed by only using pesticide-free methods.

Athletic Fields in Pesticide Free Parks

Critical staffing shortages have posed many challenges for park operations over the past year. As a result, routine maintenance on the skinned infields of athletic field diamonds to handle weed growth during the off-season was inconsistent. To prepare these surfaces for opening day, staff successfully utilized alternative practices for vegetative management. These practices included cutting and digging weeds with specialized athletic field grooming equipment, additional visits to the fields for dragging beyond regular maintenance standards, use of hot foam, and use of hand tools on field edges. For example, Cedar Creek Local Park, Hoyles Mill Village Local Park, and Kings Crossing Local Park received mechanical treatment to suppress and remove unwanted vegetation within the infields and warning tracks (as applicable). Unwanted vegetation is removed to improve playability, remove tripping hazards, and protect player safety.

With the use of the latest specialized athletic field maintenance equipment, staff can manage most infield and warning track vegetation using a variety of attachments, dependent on the specific need. This reduces the time spent utilizing additional alternative practices.



Mechanical vegetative management at Kings Crossing Local Park.

Pesticide-Free Playgrounds

Montgomery Parks maintains all 276 playgrounds without the use of pesticides.

Maintenance crews utilize hand tool weeding methods, hot foam equipment, and wood fiber mulch replacement as the most frequent management and maintenance practices for weeds that infiltrate wood fiber surfacing on playgrounds.

Hot foam was and continues to be the primary strategy used to control weeds in wood fiber playground surfacing. During this reporting period, staff spent 965 labor hours at a labor cost of \$37,219. Considering all control strategies used to manage these surfaces, the use of hot foam represents approximately 55 percent of the total labor time. Hand tools were used for 678 labor hours, or 38 percent of the time, at a labor cost of \$31,187. Surface grooming was used as a weed control method for 107 hours, or 6% of the time, for a labor cost of \$10,457.



*Above left, a staff person utilizing hot foam to treat weeds on a playground.
Above right, a playground that has received weed management without the use of pesticides.*

As first reported in 2019, Carolina horsenettle (*Solanum carolinense*) continues to be a challenging weed species to manage on playground surfaces. Listed as a noxious weed in several states, Carolina horsenettle, with its deep root structure and aggressive growth pattern, is also characterized by sharp yellow spines on multiple parts of the plant. The leaves and fruit are also poisonous to humans and animals.

Although impacted parks require additional monitoring and treatment to promote safety on these surfaces, the use of hot foam has proven an effective strategy to manage Carolina horsenettle.

Integrated Pest Management on Athletic Fields

Staff in all management areas continue to invest in versatile athletic field maintenance equipment to increase opportunities to remove weeds without the use of pesticides on skinned areas such as warning tracks and infields.

Staff also integrate use of products approved by Montgomery County Code Sec. 33B to promote healthy turf and safe, playable surfaces for park users.

During this reporting period, staff utilized numerous alternative practices to manage weeds on athletic fields. These include the use of hand tools as well as specialized equipment to physically remove weeds rather than applying synthetic pesticides to the playing surface. Specialized equipment uses a variety of attachments such as rakes, weed bars to cut weeds, and athletic field groomer/renovator attachments to remove or damage undesirable plants from playable surfaces.

Mechanical Control of Weeds on Athletic Fields



Featured on the cover of this report and above (left), this infield groomer provides a specialized “cutting” action to remove surface vegetation. If routinely performed, this action will injure the plant, depriving it of an opportunity for photosynthesis leading to eventual decline. Featured above (right) depicts a box grader which is typically used for drainage purposes but can also be used as another form of vegetation management within skinned areas on infields and warning tracks.

Use of Alternative Products on Athletic Fields

In combination with cultural and mechanical strategies, Park staff have been experimenting with use of products compatible with Montgomery County's pesticide law, to support healthy turf on some rectangular athletic fields. Historically, standard maintenance on rectangular turf fields in local parks has consisted of routine mowing, as well as cultural practices like aeration. As time has allowed, staff have begun to explore new options for control of broadleaf weeds on fields including the use of corn gluten and iron-based products.

Several athletic fields have seen some success with this combination of products, utilized at specific timed intervals, and based on environmental conditions. Staff will continue assessing individual field conditions and needs to determine best application methods for specific fields.



Cross Creek Club Local Park has received treatment with corn gluten and iron-based products to control broadleaf weeds.

Randolph Hills Local Park Renovation

A large-scale renovation to the athletic field diamond at Randolph Hills Local Park was completed without the use of pesticides. Mechanical vegetative management techniques were utilized to renovate this entire diamond athletic field. The field also was suffering from drainage issues which were addressed through the renovation. Primary equipment used to complete this project included a sod cutter, skid steer, reverse rotation rototiller, top dresser, sod installer and laser grader.



Before (left) and after (right) full mechanical renovation at Randolph Hills Local Park.

In addition to the skinned and turf areas, the player bench areas were also renovated at Randolph Hills to remove extensive weed growth utilizing mechanical strategies (hand tools), apply a landscape fabric barrier, and replenish bluestone dust.

Pictured to the right are images during and immediately after renovation of the player bench areas at Randolph Hills Local Park.



Athletic Field Pilot – Program Update

Beginning in fall 2019, Montgomery Parks undertook a three-year athletic field pilot program to learn about the impacts and best practices of maintaining athletic fields using organic turf management strategies.

A team of turfgrass experts from the University of Maryland were engaged to oversee program implementation and make independent assessments for consistency and field quality and a contractor was retained to implement the program.

Pilot Background

Two bermudagrass fields at Laytonia Recreational Park were selected for the pilot. This location was chosen as it could provide a side-by-side comparison of field maintenance utilizing integrated pest management strategies while comparing conventional and organic methods for turf management.

In 2020, the COVID-19 pandemic led to an unanticipated lack of play on the fields due to health/safety restrictions. This removed over five months of play and wear on the fields, allowing both fields to recover from any wear they had received the previous year. When sports resumed in the fall of 2020, play was limited and permitted hours remained lower than normal.



Aerial image of the two rectangular turf athletic fields at Laytonia Recreational Park that are being used for the pilot program.

The University of Maryland team continued the pilot study at Laytonia Recreational Park as well as on their in-house test plots at the Paint Branch Turfgrass Research Facility. Treatment schedules for both fields at Laytonia Recreational Park were set annually by two turf management experts and implemented by the contractor.

Two key metrics that the turfgrass experts focused on were surface firmness and shear strength (added in year two). Surface firmness, which has a direct correlation to player safety, measures how much impact the surface can take from a falling ball. Shear strength measures the amount of side pressure turfgrass can take before it shears at the root crowns and is an indicator of turf rooting and traction on the field. Data were also collected on turfgrass quality, which is a visual assessment that looks at density, uniformity, and color of the

turf. This was paired with a quantitative metric, the normalized difference vegetative index (NDVI), which assesses the amount of chlorophyll and type of leaf cell structure present within the turf canopy. The University of Maryland team collected and analyzed the data throughout the project.

Next Steps

The University of Maryland will provide a final report on the progress, conclusions, and next steps for this pilot study. A full review of the study and recommendations for future management strategies will be included in the next report to the Council in July 2023.

Advancements in Natural Resource Management

Conservation of natural resources is critical to Montgomery Parks' mission and values. Natural resources can be significantly altered by environmental and other stressors that can deplete the health and diversity of native plants and wildlife. These may impact delivery of essential ecological services that we all rely upon. Park staff work diligently to steward resources utilizing the best available science, tools, and techniques to reduce harm while managing

Dauber Tool Technology for Targeted Treatments

Within an integrated pest management framework, multiple strategies and techniques are considered and used to manage pests which may include a combination of cultural practices, mechanical removal, use of biological controls, and/or the use of pesticides. Managing non-native invasive (NNI) plants on parkland is very challenging and there are numerous programs in place within the department to combat NNIs on parkland while also protecting and promoting growth of native vegetation.

Staff working in the department's designated Best Natural and Biodiversity Areas and other priority natural areas have begun using a handheld dauber tool for cut-stump herbicide applications on NNI vegetation. The intent of this tool is to target and significantly reduce pesticide output when performing treatments. The tool feeds the pesticide through a control valve to a sponge tip. This eliminates drift and overspray, leading to reduced product use while also being protective of adjacent plantings. In areas where a pesticide is the most appropriate option for control, this tool provides a targeted method of delivery that, by design, also improves safety for the applicator. When compared to traditional spray methods of pesticide application, the use of the dauber tool to treat NNI plants reduces pesticide use by about 80%.

To date, this tool has been used to treat mature woody NNI species like barberry (*Berberis thunbergii*), autumn olive (*Elaeagnus umbellate*), honeysuckle (*Lonicera spp.*), and multiflora rose (*Rosa multiflora*).



Pictured above (left) is the dauber tool. The sponge tip is on the left and the control valve on the right. Right, is a pesticide applicator carefully applying product to a cut stump. The adjacent ferns are protected from this application by the dauber tool.

Preserving Oaks on Parkland

Oak trees (*Quercus spp.*) are declining regionally, and scientists don't yet know the exact cause. Oaks are a critical component of deciduous forest ecosystems and Montgomery Parks provides habitat for approximately 15 species of oak. Serving as important habitat and food sources for wildlife, oaks offer other critical ecological services like improved watershed health and climate mitigation through carbon sequestration and serving as an important canopy species.

While arborists, urban foresters, and scientists have been attempting to identify a root cause for the decline in oak species in this region, several stressors are being considered as potential factors. These include climate-related factors, drought, site condition, soil compaction, tree age, disease, or other pests.

Parks urban foresters have been tracking the regional decline in oaks and have been monitoring oaks in landscaped areas on parkland for damage, disease, and decline. Symptoms identified include sudden browning of foliage, canopy thinning, and loss of branches.

Sudden decline was also seen in ash trees (*Fraxinus spp.*) following invasion by the emerald ash borer (EAB - *Agilus planipennis*), a non-native invasive beetle from Asia. To date, over 5,500 ash trees on parkland have been lost to the impacts of this invasive insect pest. Prior to 2016, ash trees comprised an important component of the tree canopy in stream valleys and landscaped areas of parkland. Little could be done to protect the trees against this invasive insect and impacted trees had to be removed to protect the safety of park users. With the loss of the ash trees, a loss of ecological services followed.

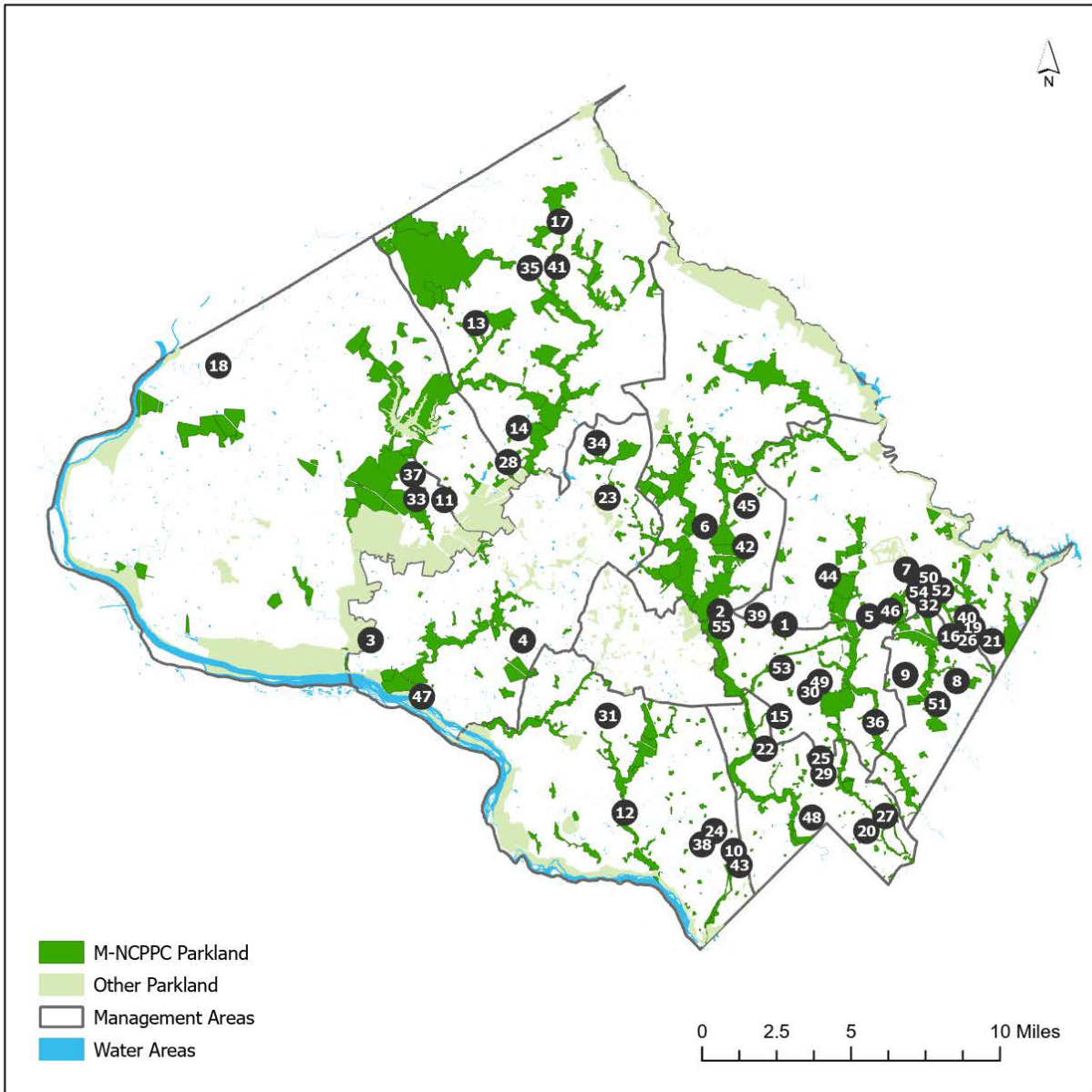
In 2022, Park urban foresters noted significant decline in white oaks (*Quercus alba*) at Jesup Blair Local Park and Johnsons Local Park. The oak trees in these parks are of significant size and value to both natural resources as well as to the surrounding community. Additionally, each of these park sites has historical significance, and the large old oaks comprise an important element of the historical environmental viewshed.



Parks urban forester carefully applying growth regulator to an oak in decline.

Park urban foresters determined that the use of a growth regulator and fungicide would be the best strategy to help the oaks recover from the unknown stressor/disturbance impacting their growth. The product is soil-applied which allows for targeted and immediate uptake into the root system of the tree. The growth regulator works to gently slow the growth of a tree, allowing energy to be redirected to support areas in decline. This can be applied on a 3-year schedule, if needed. Jesup Blair Local Park's oak trees received treatment in spring of 2022, and after seeing the improvement in treated vs. untreated trees, Johnson's Local Park was then scheduled for treatment in fall of 2022.

Unlike the situation with ash trees impacted by EAB where little could be done to preserve the trees, in this situation Park urban foresters have turned to the science of growth regulators to preserve the life of these valuable mature oak trees while more information can be collected, and we have a better understanding of what is causing the regional decline in this critical species. Without the treatment, these trees would certainly have declined to a point of no return, resulting in a significant loss of ecological services that are so critical to preserve.



Aquarius Local Park	1	College View Neighborhood Park	15	General Getty Neighborhood Park	29	Norwood Local Park	43
Bauer Drive Local Park	2	Countryside Neighborhood Park	16	Glenmont Greenway Urban Park	30	Norwood Village NCA	44
Berryville Road NCA	3	Damascus Neighborhood Park	17	Highland Stone Neighborhood Park	31	Olney Acres Neighborhood Park	45
Big Pines Local Park	4	Dickerson Local Park	18	Hopefield Neighborhood Park	32	Peach Orchard NCA	46
Bonifant NCA	5	Duval Road NCA	19	Hoyles Mill Village Local Park	33	Pennyfield Lock NCA	47
Bowie Mill Local Park	6	East Silver Spring Urban Park	20	Hunters Woods NCA	34	Rosemary Hills-Lyttonsville Local Park	48
Browns Corner NCA	7	Edgewood Neighborhood Park	21	John Haines Neighborhood Park	35	Saddlebrook Local Park	49
Calverton NCA	8	Edith Throckmorton Neighborhood Park	22	Kemp Mill Estates Local Park	36	Spencerville Local Park	50
Cannon Road Local Park	9	Emory Grove Hills NCA	23	King's Crossing Local Park	37	Stonehedge Local Park	51
Caroline Freeland Urban Park	10	English Court NCA	24	Maiden Lane Urban Park	38	Twinponds NCA	52
Cedar Creek Local Park	11	Evans Parkway Neighborhood Park	25	Manor Park NCA	39	Valleywood Neighborhood Park	53
Cindy Lane Neighborhood Park	12	Fairdale Road NCA	26	Miles Road NCA	40	Wembrough Neighborhood Park	54
Clarksburg Village North Local Park	13	Flower Avenue Urban Park	27	Moyer Road Local Park	41	Wood Local Park	55
Clearspring Local Park	14	Fox Chapel Neighborhood Park	28	Norbeck Meadows Neighborhood Park	42		

Appendix: Products Applied by Contractors from July 1, 2022 - December 31, 2022

Date	Location	Area Treated	Product	Problem	Reason for treatment	Start time
5-Jul	Little Bennett Regional Park	Day Use Area	Transline	Thistle, Johnsongrass	Restore Habitat and Protect Ecosystem	8:00 a.m.
6-Jul	Little Bennett Regional Park	Beall Field	Transline	Thistle	Restore Habitat and Protect Ecosystem	8:30 a.m.
7-Jul	Seneca Crossing Local Park	Field between Brink Road and Seneca Forest Circle	Transline, Volunteer	Noxious Weeds	Restore Habitat and Protect Ecosystem	8:30 a.m.
11-Jul	Little Bennett Regional Park	Blue Bird Hill	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	8:30 a.m.
11-Jul	Little Bennett Regional Park	Browning Run Trail West	Transline	Thistle	Restore Habitat and Protect Ecosystem	11:30 a.m.
11-Jul	Little Bennett Regional Park	Browning Run Trail East	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	12:45 p.m.
13-Jul	Cabin John SVU #1/Cabin John Local Park	Stream Valley	Garlon 3A	Japanese knotweed	Restore Habitat and Protect Ecosystem	9:00 a.m.
14-Jul	Little Bennett Regional Park	Lewisdale Road Horse Trailer Parking Area	Transline	Thistle	Protect Amenities/Infrastructure	7:15 a.m.
14-Jul	Little Bennett Regional Park	Horse Trailer Parking Lot	Transline	Noxious Weeds	Protect Amenities/Infrastructure	8:00 a.m.
18-Jul	Arora Hills Local Park	Field North of Baseball Diamonds	Transline, Volunteer	Noxious Weeds	Restore Habitat and Protect Ecosystem	11:30 a.m.
18-Jul	Hoyles Mill Conservation Park	Floodplain Adjacent to Bridge	Rodeo	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:00 a.m.
18-Jul	Gene Lynch Urban Park	Hornbeams, Elms	Baseline, Altus	Invasive Weeds	Protect Plantings	1:00 p.m.
19-Jul	Ovid Hazen Wells Recreational Park	Area off Skylark Drive	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
20-Jul	Ovid Hazen Wells Recreational Park	Area off Skylark Drive	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
21-Jul	Little Bennett Regional Park	Floodplain	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:15 a.m.
25-Jul	Damascus Recreational Park	Fields along Northwest Corner of Park	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	10:30 a.m.
25-Jul	Oak Ridge Conservation Park	Encroachment Areas Along Stream	Transline	Thistle	Restore Habitat and Protect Ecosystem	8:30 a.m.
25-Jul	Westmoreland Hills Local Park	Forested Areas and Planting Areas	Rodeo	Noxious Weeds	Restore Habitat and Protect Ecosystem	7:45 a.m.
26-Jul	Red Wiggler Community Farm	Non-organic Area	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	8:30 a.m.
27-Jul	Blockhouse Point Conservation Park	East of Paw Paw trail, Near River	Acclaim Extra	Japanese stiltgrass	Restore Habitat and Protect Ecosystem	7:30 a.m.
28-Jul	Ridge Road Recreational Park	Northern side of field 4, southern side of fields 1, 2	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	12:15 p.m.
28-Jul	Waters House Special Park	Greenway Trails Area	Transline	Noxious Weeds	Restore Habitat and Protect Ecosystem	8:45 a.m.
29-Jul	Waters House Special Park	Greenway Trails Area	Volunteer	Johnsongrass	Restore Habitat and Protect Ecosystem	9:15 a.m.
1-Aug	Maydale Conservation Park	North of Stream, East of Parking Lot	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:30 a.m.
2-Aug	River Road Shale Barrens Conservation Park	Forested hillside area north of River Road, east of drainage area	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
3-Aug	River Road Shale Barrens Conservation Park	Forested hillside area north of River Road, east of drainage area	Rodeo	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
3-Aug	Ken-Gar Palisades Local Park	Northern End of Park	Roundup Custom	Bamboo	Restore Habitat and Protect Ecosystem	10:00 a.m.
3-Aug	Maydale Conservation Park	Between Stream and Mowed Trail	Rodeo	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
10-Aug	Bennett Creek Conservation Park	Forested Area North of Meadow Edge	Rodeo, Pathfinder II	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
10-Aug	Bennett Creek Conservation Park	Meadow	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	11:15 a.m.
12-Aug	Bennett Creek Conservation Park	Forested hillside area north of River Road, east of drainage area	Pathfinder II	Invasive Weeds	Restore Habitat and Protect Ecosystem	1:00 p.m.
12-Aug	Bennett Creek Conservation Park	Meadow	Pathfinder, Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
12-Aug	Ray's Meadow Local Park	Edge of Soccer Fields	Roundup Custom	Invasive Weeds	Protect Amenities/Infrastructure	7:30 a.m.
12-Aug	Ray's Meadow Local Park	Behind Soccer Field	Roundup Custom	Invasive Weeds	Protect Amenities/Infrastructure	6:45 a.m.
16-Aug	Rock Creek SVU #4	Hillside Behind 11300-11316 Palisades Court	Roundup Custom	Bamboo	Restore Habitat and Protect Ecosystem	7:00 a.m.
17-Aug	Hoyles Mill Conservation Park	Floodplain Adjacent to Bridge	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:00 a.m.
23-Aug	Hoyles Mill Conservation Park	Floodplain Adjacent to Bridge, Off Trail	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
23-Aug	Rock Creek SVU #4	Hillside behind 11300-11316 Palisades Court	Roundup Custom	Bamboo	Restore Habitat and Protect Ecosystem	7:00 a.m.
24-Aug	Hoyles Mill Conservation Park	Forested Areas Adjacent to Trail	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
30-Aug	River Road Shale Barrens Conservation Park	Forested hillside area north of River Road, east of drainage area	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
30-Aug	Little Bennett Regional Park	Floodplain	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	11:30 a.m.
1-Sep	Wheaton Regional Park	Park House	Garlon 3A, Transline	Noxious Weeds	Protect Amenities/Infrastructure	7:00 a.m.
13-Sep	Maydale Conservation Park	Floodplain on South Side of Stream	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
14-Sep	Muddy Branch SVU #2	Behind 12613-12625 High Meadow Road	Garlon 3A, Pathfinder II	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
15-Sep	Bennett Creek Conservation Park	Forested Area North of Meadow Edge	Garlon 3A, Pathfinder II	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
16-Sep	Bennett Creek Conservation Park	Forested hillside area north of River Road, east of drainage area	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
16-Sep	Kemp Mill Urban Park	Ponds	Flumigard, Aquaneat	Invasive Weeds	Restore Habitat and Protect Ecosystem	9:30 a.m.
29-Sep	Hoyle Mill Conservation Park	Forested Area South of Bridge, West of Hoyles Mill Trail	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
30-Sep	Hoyles Mill Conservation Park	Forested area south of bridge, west of Hoyles Mill trail	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
6-Oct	Muddy Branch SVU #2	Behind 12613-12625 High Meadow Road	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
7-Oct	Ken-Gar Palisades Local Park	Bamboo Control Site	Roundup Custom	Bamboo	Restore Habitat and Protect Ecosystem	1:30 p.m.
10-Oct	Little Bennett Regional Park	Floodplain at end of Prescott Road	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	8:00 a.m.
11-Oct	Little Bennett Regional Park	Floodplain at end of Prescott Road	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:30 a.m.
20-Oct	Black Hill Visitor Center	Meadow Area	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	10:00 a.m.
20-Oct	Black Hill Visitor Center	Meadow Area	Roundup Custom	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:45 a.m.
8-Nov	Reddy Branch Stream Valley Park	Near 4102 Brookville Road	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:00 a.m.
9-Nov	Reddy Branch Stream Valley Park	Near 4102 Brookville Road	Garlon 3A	Invasive Weeds	Restore Habitat and Protect Ecosystem	7:00 a.m.

Appendix: Products Applied by Montgomery Parks Staff from July 1, 2022 - December 31, 2022

Date	Location	Area Treated	Product	Problem	Reason for treatment	Start time
1-Jul	Brookside Gardens	Reflection Terrace and Gude Garden Island	Chlorothalonil 720 SFT	Dothistroma	Protect Plantings	8:30 a.m.
1-Jul	Brookside Gardens	Gude Garden, Berry Border	Rodeo	Weeds	Protect Plantings	9:30 a.m.
1-Jul	Brookside Gardens	Rose Garden	Spectracide Pro	Yellow jackets	Prevent Harm/Safety	7:00 a.m.
7-Jul	Brookside Gardens	Reflection Terrace, Gude Garden, Upper Gude Pond	Zyban	Dothistroma	Protect Plantings	8:30 a.m.
11-Jul	Cabin John Athletic Area	Povich Field; Fields 2, 5, 6	T-Nex	Turfgrass	Support Plant/Turf Health	6:30 a.m.
11-Jul	Brookside Gardens	Conservatory	Mainspring	Caterpillars	Protect Plantings	7:00 a.m.
12-Jul	Meadowside Nature Center	Landscape Bed	Wasp-Freeze II	Hornets	Prevent Harm/Safety	8:50 a.m.
13-Jul	Black Hill Regional Park	Bark Blower Machine	Tetramethrin	Hornets	Prevent Harm/Safety	6:20 a.m.
14-Jul	South Germantown Recreational Park	Field 23	Primo Max	Turfgrass	Support Plant/Turf Health	11:00 a.m.
14-Jul	South Germantown Recreational Park	Field 24	Primo Max	Turfgrass	Support Plant/Turf Health	11:00 a.m.
18-Jul	Black Hill Regional Park	Picnic Area	Prosecutor	Stiltgrass, Mile a Minute	Restore Habitat and Protect Ecosystem	9:30 a.m.
19-Jul	Clarkmont Local Park	Landscape Beds, Tree Beds	Prosecutor	Ragweed, Crab and Goose Grass, Ground Ivy	Protect Plantings	7:00 a.m.
20-Jul	Brookside Gardens	Turfgrass	Crosscheck 0.069 0-0-7	Leaf Hopper	Support Plant/Turf Health	9:00 a.m.
20-Jul	Dowden's Ordinary Special Park	Landscape Beds, Mulched Tree Rings	Cheetah Pro	Weeds	Restore Habitat and Protect Ecosystem	7:00 a.m.
20-Jul	Jeanne Onufry Local Park	Mulched Tree Rings	Cheetah Pro	Weeds	Restore Habitat and Protect Ecosystem	10:00 a.m.
20-Jul	Plumgar Local Park	Mulched Tree Rings	Cheetah	Weeds	Restore Habitat and Protect Ecosystem	10:45 a.m.
20-Jul	Waters House Special Park	Landscape Beds, Mulched Tree Rings	Cheetah Pro	Weeds	Restore Habitat and Protect Ecosystem	12:00 p.m.
20-Jul	Sligo Creek SVU 1	Sligo Creek Pkwy and Hard Surface Trail - Physical Barriers Holding Water	Mosquito Dunks	Mosquitoes	Prevent Harm/Safety	9:00 a.m.
21-Jul	Brookside Gardens	Gude Garden	Conserve SC	Golden Catalpa Sphinx Moth	Protect Plantings	7:00 a.m.
21-Jul	Waters House Special Park	Landscape Beds, Mulched Tree Rings	Cheetah Pro	Weeds	Restore Habitat and Protect Ecosystem	7:00 a.m.
22-Jul	Brookside Gardens	Gude Garden and Berry Border	AquaNeat	Houttuynia cordata, Other Weeds	Protect Plantings	11:30 a.m.
22-Jul	Brookside Gardens	Reflection Terrace and Gude Island	Phyton 27	Dothistroma	Support Plant/Turf Health	7:00 a.m.
22-Jul	Meadowside Nature Center	Landscape Bed	Wasp-Freeze	Hornets	Prevent Harm/Safety	8:03 a.m.
25-Jul	Cabin John Athletic Area	Povich Field; Fields 2, 5, 6	T-Nex	Turfgrass	Support Plant/Turf Health	7:30 a.m.
27-Jul	Warner Circle Special Park	Elm Tree	Arbotect	Dutch Elm Disease	Protect Plantings	8:00 a.m.
1-Aug	Little Seneca Stream Valley Park Unit 1	Air Park Fence Lines	Prosecutor	Carolina Horse Nettle, Ground Ivy, Crabgrass	Protect Amenities and Infrastructure	8:30 a.m.
1-Aug	Brookside Gardens	Conservatory Parking Lot	Spectracide Pro	Yellow Jackets	Prevent Harm/Safety	7:00 a.m.
2-Aug	South Gunner's Branch Local Park	Chainlink Fence	Element A3	Bush Honeysuckle, Russian Olive	Protect Amenities and Infrastructure	7:00 a.m.
2-Aug	Brookside Gardens	Path Next to Azalea Garden	Spectracide Pro	Yellow Jackets	Prevent Harm/Safety	6:30 a.m.
3-Aug	Black Hill Regional Park	Area Around Boat Ramp	Rodeo	Chinese Silver Grass	Restore Habitat and Protect Ecosystem	7:00 a.m.
3-Aug	Cross Creek Local Park	Soccer Field 1	Sedgehammer, Revolver	Goosegrass, Nutsedge	Meet Standards of Play/Protect Plantings	10:00 a.m.
5-Aug	Ayrlawn Local Park	Trail Edge (Northeast Part of Park)	Rodeo	Japanese Knotweed	Restore Habitat and Protect Ecosystem	11:50 a.m.
5-Aug	Cabin John Regional Park	Forested Natural Area Along Main Creek	Rodeo	Japanese Knotweed	Restore Habitat and Protect Ecosystem	11:05 a.m.
9-Aug	Woodstock Equestrian Park	Wooded Area Adjacent to Big Woods Loop Trail	Rodeo	Jetbead	Restore Habitat and Protect Ecosystem	10:25 a.m.
10-Aug	Block House Point Conservation Park	Forested Areas Between Gas Line and Callithea Farm Property	Rodeo	Japanese Stiltgrass	Restore Habitat and Protect Ecosystem	11:15 a.m.
12-Aug	Brookside Gardens	Conservatory	AquaNeat	Poison Ivy, Various Weeds	Prevent Harm/Safety	8:15 a.m.
12-Aug	Little Bennett Regional Park Day Use Area	Mulch Bed in Picnic Area, Parking Lot	Cheetah Pro	Noxious Weeds	Protect Amenities and Infrastructure	9:00 a.m.
12-Aug	Little Bennet Maintenance Yard	Parking Lots	Cheetah Pro	Noxious Weeds	Protect Amenities and Infrastructure	10:00 a.m.
13-Aug	Brookside Gardens	Conservatory Garden Bed	Spectracide Pro	Yellow jackets	Prevent Harm/Safety	8:15 p.m.
15-Aug	Cabin John Athletic Area	Povich Field; Fields 2, 5, 6	T-Nex	Turfgrass	Support Plant/Turf Health	7:30 a.m.
15-Aug	Briggs Chaney Community Garden	Garden Bed	PT Wasp-Freeze	Wasps	Prevent Harm/Safety	10:00 a.m.
16-Aug	Waring Station Local Park	Fence Line	Fusiladell	Japanese Stiltgrass, Barnyard grass	Protect Amenities and Infrastructure	10:30 a.m.
16-Aug	Black Hill Regional Park	Wooded Picnic Area	Fusiladell	Japanese Stiltgrass	Restore Habitat and Protect Ecosystem	7:00 a.m.
16-Aug	Arora Hill Local Park	Field 2	Drive	Turfgrass	Meet Standards of Play	10:30 a.m.
16-Aug	Arora Hill Local Park	Field 1	Drive	Poa, Crabgrass	Meet Standards of Play	7:30 a.m.
17-Aug	Ovid Hazen Wells Recreational Park	Field 1	Drive	Poa, Crabgrass	Player Safety; Meet Standards of Play	7:00 a.m.
17-Aug	Ovid Hazen Wells Recreational Park	Field 2	Drive	Poa, Crabgrass	Player Safety; Meet Standards of Play	9:30 a.m.
17-Aug	Ovid Hazen Wells Recreational Park	Field 3	Drive	Poa, Crabgrass	Player Safety; Meet Standards of Play	1:00 p.m.
18-Aug	Ridge Road Recreational Park	Field 1	Drive	Poa, Crabgrass	Player Safety; Meet Standards of Play	7:00 a.m.
18-Aug	Ridge Road Recreational Park	Field 2	Drive	Poa, Crabgrass	Player Safety; Meet Standards of Play	9:30 a.m.
18-Aug	Ridge Road Recreational Park	Field 3	Drive, Lucto	Poa, Crabgrass	Player Safety; Meet Standards of Play	12:00 p.m.
19-Aug	Black Hill Regional Park	Area Behind Bird Blind	Element A3	Poison Ivy	Prevent Harm/Safety	1:00 p.m.
19-Aug	Meadowbrook Maintenance Yard	Landscape Bed	RoundUp Quick Prp	Weeds	Protect Plantings	9:00 a.m.
23-Aug	Woodlawn Cultural Park	Planting Beds, Horse Rink, Buildings	Prosecutor, Cool Power	Invasive Weeds	Protect Plantings	7:00 a.m.
26-Aug	Germantown Town Center Urban Park	Landscape Beds	Sedgehammer	Nutsedge	Protect Plantings	9:30 a.m.
26-Aug	Germantown Town Center Urban Park	Landscape Beds	Sedgehammer	Nutsedge	Support Plant/Turf Health	9:30 a.m.
26-Aug	Woodstock Equestrian Park	Fence Line	Prosecutor Pro	Invasive Weeds	Protect Amenities and Infrastructure	7:00 a.m.
29-Aug	Wheaton Regional Park Athletic Complex	Field 1	Drive XLR8, Revolver	Turfgrass	Player Safety; Meet Standards of Play	8:30 a.m.
1-Sep	McCrillis House and Gardens	Debris Bin	Wasp-Freeze	Yellow Jackets	Prevent Harm/Safety	2:15 p.m.
2-Sep	Brookside Gardens	Conservatory	AquaNeat	Poison Ivy	Prevent Harm/Safety	9:45 a.m.
8-Sep	Brookside Gardens	Gude Garden and Viburnum Garden	AquaNeat	Invasive Weeds	Protect Plantings	11:30 a.m.
9-Sep	Brookside Gardens	Gude Garden and Viburnum Garden	AquaNeat	Invasive Weeds	Protect Plantings	8:30 a.m.
9-Sep	Brookside Gardens	Peninsula, Glenallan Ave., Conservatory Parking Lot	AquaNeat	Invasive Weeds	Protect Plantings	9:00 a.m.
9-Sep	Meadowbrook Maintenance Yard	Flowerbeds	Lesco Momentum 4-Score, Round Up Quick Prp	Noxious Weeds	Protect Amenities and Infrastructure	9:30 a.m.

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Date	Location	Area Treated	Product	Problem	Reason for treatment	Start time
20-Sep	Germantown Town Center Urban Park	Landscape Beds, Paved Walkway	Prosecutor	Ground Ivy, Barnyard Grass, Purslane	Protect Plantings/Protect Amenities and Infrastructure	8:00 a.m.
21-Sep	Brookside Gardens	Gude Garden	Solitare WSL	Invasive Weeds	Support Plant/Turf Health	8:00 a.m.
26-Sep	Brookside Gardens	Board Bridge by Upper Aquatic Pond and Fence Line	AquaNeat	Horsetail, Porcelain Berry	Protect Plantings	1:00 p.m.
11-Oct	Germantown Town Center Urban Park	Landscape Beds	Prosecutor	Porcelain Berry, Honeysuckle	Protect Plantings	12 p.m.
14-Oct	Ayrlawn Local Park	Along Gravel Trails (Northwest Corner of Park)	Garlon 3A	Japanese Knotweed	Restore Habitat and Protect Ecosystem	10:45 a.m.
14-Oct	Cabin John SVU #1/Cabin John Local Park	Floodplain on West Side of Stream	Garlon 3A	Japanese Knotweed	Restore Habitat and Protect Ecosystem	11:33 a.m.
17-Oct	Cabin John Athletic Area	Povich Field; Fields 2, 5, 6	Tribute Total; Princep; Specticle Flo	Turfgrass	Support Plant/Turf Health	7:30 a.m.
18-Oct	Cabin John Regional Train Tracks	Miniature Train Tracks	Ranger Pro	Invasive Weeds	Protect Amenities and Infrastructure	7:30 a.m.
19-Oct	Cabin John Regional Park	Forested Area Along Stream (Eastern Side)	Garlon 3A	Japanese Knotweed	Restore Habitat and Protect Ecosystem	1:50 p.m.
10-Nov	Blair Local Park	Field 1	Fiesta	Broadleaf Weeds	Meet Standards of Play	11:00 a.m.
10-Nov	Blair Local Park	Field 2	Fiesta	Broadleaf Weeds	Meet Standards of Play	10:00 a.m.
11-Nov	Brookside Gardens	Trial Garden	Bor 8 Rods	Fungal Decay	Protect Amenities and Infrastructure	11:00 a.m.
15-Nov	Johnson's Local Park	Grove of Trees Adjacent to Parking Lot	Cambistat	Tree Decline	Support Plant/Turf Health	7:30 a.m.



Montgomery Parks
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